

Haskell Lake Area Petroleum Contamination Site (Tower Standard LUST)

Meeting Date: 06 July 2017

Location: teleconference

Meeting Participants:	WDNR	John Robinson, Chris Saari
	Lac du Flambeau	- absent -
	REI Engineering	Dave Larsen
	EPA R5 LCD	Sherry Kamka, Bob Egan
	EPA R5 TIAO	Anthony Greenwater

Discussion Items:

- 1. Purpose of meeting.** The group agreed to continue the technical discussions of previous calls, avoiding topics requiring a larger consensus that included LDF. At the conclusion of the meeting, all present agreed that summary notes from the call should be distributed to LDF to promote planning and advance the technical discussion.
- 2. Proposed well locations.** The group reviewed proposed the same new well nest locations as before. Preliminary WDNR response regarding suitability of PECFA funding has not changed.
 - YES: 1, 7, and a location between 2 and 4.
 - NO: 3, 5
 - POSSIBLE: 6, though location is unsettled and the potable water well to west might suffice.
- 3. Groundwater profiling and soil samples.** Different technologies were evaluated to support setting the well screens in the new well nests. Possibilities include groundwater profiling and/or collection of soil samples. WDNR stated it must be careful not to duplicate earlier work, but supported the preliminary data collection. EPA also saw value in similar work around locations not likely to be otherwise supported by PECFA (3 and 5). WDNR expected to decide the scope of profiling/sampling by 14 July. WDNR also expected that its contracting vehicle could be activated within a few days after that decision, following an approval request from REI.

Regarding proposed location 6, WDNR preferred to obtain profiling and/or sampling data before deciding utility and appropriateness under PECFA. The property owners' well to the west was said to be about 70-80 feet in depth; history includes use for a minnow tank and non-detect sampling results.
- 4. Groundwater profiling.** REI reported on peristaltic profiler options. Utilizing a separate hole for each sample, it was estimated that work might require only two days. Required tooling was estimated at 60-120 feet. No soil samples would be collected. Cost was roughly estimated at \$5,000, plus mobilization.
- 5. GeoProbe.** EPA discussed conversations with GeoProbe. Multiple samples could be collected from each hole. Company recommended use of Model 8140, a tracked sonic rig, for deeper holes. Model 7822, a no-casing push rig, might be appropriate for collection of discrete soil samples. Heaving is expected to pose some problems with soil sampling, as might refusal above design targets. The 7822 could also be used to collect water samples; each 60-foot hole might require one day to complete. Those familiar with earlier drilling at the site noted that chance of refusal increases nearer the lake.

GeoProbe provided names of three contractors with experience but no known availability: Stock and Stearns, both in Michigan, and Cascade in Minnesota. If availability does not fit project schedule, from these or other operators, GeoProbe methods will be dropped from consideration. EPA will distribute all GeoProbe info to the group, including a poster describing capabilities of the Hydraulic Profiling Tool - Groundwater Sampler (HPT-GWS).

6. **Relation between profiling, new well nests, and interim action.** Groundwater and/or soil profiling would support screening decisions in new wells. Those present agreed that neither the profiling nor the new wells are needed to design and implement an interim source removal action, whether excavation or AS/SVE. WDNR (Saari) described the source area as well-sampled and well-understood. EPA (Kamke) stated that the Agency also wants to move ahead with an interim action directed at the source. WDNR (Robinson) stated that PECFA funding for this year was now secure, but an interim action *must* be installed this year to meet the overall PECFA timeline.

7. **Interim action assessments.** In a task order under development, EPA has been planning to assess the potential effectiveness of excavation. EPA does not expect to have that assessment until sometime this fall. WDNR, on the other hand, would typically produce a *Remedial Action Options Report* prior to choosing an interim action. If limited to excavation and AS/SVE, WDNR and REI thought a simplified document could be produced fairly quickly. It was unclear whether EPA's planned assessment would serve any purpose, given the WDNR document and the PECFA funding timeline. EPA (Kamke) stated that the Agency would prefer to disinvest from excavation.

REI estimated that excavation of about 700 yd³ might cost about \$100,000, plus the cost of sheet piling, water treatment/disposal, etc. REI estimated that a purpose-built AS/SVE system could take 12-16 weeks to design, but an off-the-shelf system might suffice. No cost estimate for either AS/SVE option was immediately available.

WDNR expects to collect examples from its Rhinelander office of previous remedial efforts in the Minocqua area; these examples are expected to be distributed to the group by 14 July. EPA will also research Michigan DEQ files for similar situations.

8. **Owner relations.** REI provided second-hand reports that the USGS entered the property recently and completed a transect without permission from the owners. The property owners were said to have confronted the Survey, who reportedly explained they didn't know the location of property boundaries. No Tribal observers were said to be on the scene. No one on the tech call had first-hand knowledge of the situation.

WDNR and REI will contact property owners to the east soon to discuss potential for remediation impacts and identify any other concerns.

9. **Next call.** The standing tech call is scheduled for the 4th Thursday, 27 July. The group considered re-convening on some earlier dates; the most likely is Thursday, 20 July. Once scheduled, WDNR will arrange the call.

Action items:

1. WDNR will determine scope of PECFA-funded groundwater profiling and soil sampling < 14 July 2017.
2. WDNR and EPA will research and distribute relevant examples of AS/SVE < 14 July 2017.
3. WDNR and REI will contact neighboring property owners to discuss any remediation issues.
4. EPA will distribute details of its discussions with GeoProbe.